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10/720,990	11/24/2003	David G. Peot	10710/213 (PTG 1133 PUS)	3383
757 7590 07/27/2007 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			EXAMINER ALIE, GHASSEM	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/720,990
Filing Date: November 24, 2003
Appellant(s): PEOT ET AL.

**MAILED
JUL 27 2007
GROUP 3700**

Stephen C. Smith
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 06/14/07 appealing from the Office action mailed 11/17/07.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2002/0020265	GASS et al.	02-2002
2,674,130	SPYCHALLA	04-1954

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

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A. Claim 1-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Gass et al. (2002/0020265), hereinafter Gass, in view of Spychalla (2,674,130). Regarding claim 1, Gass teaches a table saw 1181 including a motor driving a movable cutting tool 40 for cutting workpieces in a cutting region. Gass also teaches a detection system 26 adapted to detect one or more dangerous conditions. Gass also teaches a reaction system 24 associated with the detection system and the cutting tool 40 wherein the reaction system 24 is configured to retract the cutting tool at least partially away from the cutting region. Gass also teaches that the tool upon detection of at least one of one or more conditions by the detection system. See Figs. 5-15 and paragraphs 55-75 in Gass. Gass does not explicitly disclose that the cutting tool retracts independently of the motor and the motor is disengaged from the cutting tool. However, the use of the cutting tool that is retracted independently from the motor is well known in the art such as taught by Spychalla. Spachalla teaches a table saw including a motor 8 driving a movable cutting tool 39, 101. Spachalla also teaches that the cutting tool retracts partially away from the cutting region by an arm 99 independently of the motor. It should be noted that the when the arm 99 is retracted the tension in the belt 110', 110'' is diminished, and consequently the cutting tool will not rotate. It should be noted that lowering and lifting of the arm 99 is performed with a help of a screw bolt and a nut. However, this action could take place by an actuator such as taught by as taught by Gass. See Figs. 1-12 and col. 4, lines 26-75 and col. 5, lines 1-23 in Spychalla. It would have been obvious to a person of ordinary skill in the art to provide Gass' table saw with the driving mechanism that drives the cutting tool without being engaged with the mechanism that vertically moves the cutting tool, as taught by Spychalla, in order to reduce the mass of the cutting tool and facilitated vertical movement of the cutting tool. In addition, rotating the saw by a direct driving

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mechanism or an indirect driving mechanism produce a same end result, since both driving mechanisms are functionally equivalent. Therefore, it would have been obvious to Gass' direct driving mechanism by the indirect driving mechanism as taught by Spychalla, since both driving mechanism are functionally equivalent.

Regarding claim 2, Gass teaches everything noted above including that the one or more conditions is proximity between a person and the cutting tool. See paragraphs 49-52 in Gass.

Regarding claims 2-7, Gass, as modified by Spychalla, teaches everything noted above including that the motor 80 indirectly drives the cutting tool 39, 101, a belt 110', 110", as taught by Spychalla, to drivingly connect the motor with the cutting tool, and a turnion 12 that carries the motor and the cutting tool. See Fig. 5 in Gass and Figs. 1-12 in Spychalla. Gass, as modified by Spychalla, also teaches that the turnion has a first side, a second side and wherein the cutting tool is mounted on the first side and the motor is mounted on the second side. Gass, as modified by Spychalla, also teaches that a motor shaft extending from the motor to the first side of the turnion 12, an arbor carrying the cutting tool 40, and a drive 35 connecting the arbor and the shaft. See Figs. 5-8 in Gass and Figs. 1-2 in Spychalla.

Regarding claims 8, Gass, teaches everything noted above including that the arbor is movable with respect to a top of the turnion 12. See Figs. 5-8 Gass.

Regarding claim 9, Gass, as modified by Spychalla, teaches everything noted above including that the arbor is in a driving engagement with the motor when the arbor is in a first position such that the cutting tool is in cutting region. See Figs. 1-12 in Spychalla.

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Regarding claim 10, Gass, as modified by Spychalla, teaches everything noted above including the arbor is out of driving engagement with the motor when the cutting tool is retracted. See Figs. 1-12 in Spychalla.

Regarding claim 11, Gass teaches everything noted above including a swing arm 1182 pivotally connected to the first side of the turnion near a front of the turnion wherein the swing arm 1182 has a first end and a second end such that the swing arm pivots about the first end. See Figs. 5-8 in Gass.

Regarding claim 12, Gass, as modified by Spychalla, teaches everything noted above including that the swing arm moves independently of the motor. See Figs. 5-8 in Gass and Figs. 1-12 in Spychalla.

Regarding claim 13-15, Gass teaches everything noted above including a restraining mechanism 1199 associated with the first side of the turnion and the second end of the swing arm 1182, wherein the restraining mechanism provides a force to retain the cutting tool in the cutting region. Gass also teaches an actuator 1183 to act on the second end of the swing arm with a force sufficient to overcome the force provided by the restraining mechanism. Gass also teaches a stop 1210 provided on the first side of the turnion such that the swing arm 1183 is in contact with the stop when the cutting roll is retracted. See Fig. 8 in Gass.

B. Claim 1-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Spychalla in view of Gass. Regarding claim 1, Spachalla teaches a table saw including a motor 8 driving a movable cutting tool 39, 101. Spachalla also teaches that the cutting tool retracts partially away from the cutting region by an arm 99 independently of the motor. It should be noted that when the arm 99 is retracted the tension in the belt 110', 110'' is diminished, and consequently the

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cutting tool will not rotate. It should be noted that lowering and lifting of the arm 99 is performed with a help of a screw bolt and a nut. See Figs. 1-12 and col. 4, lines 26-75 and col. 5, lines 1-23 in Spychalla. Spychalla does not teach a detection system adapted to detect one or more conditions. Spychalla also does not teach a reaction system associated with the detection system is configured to retract the cutting tool upon detection of at least one or more conditions by the detection system.

However, Gass teaches a table saw 1181 including a motor driving a movable cutting tool 40 for cutting workpieces in a cutting region. Gass also teaches a detection system 26 adapted to detect one or more dangerous conditions. Gass also teaches a reaction system 24 associated with the detection system and the cutting tool 40 wherein the reaction system 24 is configured to retract the cutting tool at least partially away from the cutting region. Gass also teaches that the tool upon detection of at least one of one or more conditions by the detection system. See Figs. 5-15 and paragraphs 55-75 in Gass. It would have been obvious to a person of ordinary skill in the art to provide Spychalla's table saw with the detection and reaction systems, as taught by Gass, in order to ensure the safety of the operator in the case that operator gets too close to the movable cutting tool.

Regarding claim 2, Spychalla, as modified by Gass, teaches everything noted above including that the one or more conditions is proximity between a person and the cutting tool. See paragraphs 49-52 in Gass.

Regarding claims 2-7, Spychalla, teaches everything noted above including that the motor 80 indirectly drives the cutting tool 39, 101, a belt 110', 110'', as taught by Spychalla, to drivingly connect the motor with the cutting tool, and a turnion that carries the motor and the

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cutting tool. See Figs. 1-12 in Spychalla. Spychalla also teaches that the turnion has a first side, a second side and wherein the cutting tool is mounted on the first side and the motor is mounted on the second side. Spychalla also teaches that a motor shaft extending from the motor to the first side of the turnion, an arbor 98 carrying the cutting tool 39, 101 and a drive 110' connecting the arbor and the shaft. See 1-2 in Spychalla.

Regarding claims 8, Spychalla teaches everything noted above including that the arbor 98 is movable with respect to a top of the turnion. See Figs. 1-2 in Spychalla.

Regarding claim 9, Spychalla teaches everything noted above including that the arbor 98 is in a driving engagement with the motor when the arbor is in a first position such that the cutting tool is in cutting region. See Figs. 1-12 in Spychalla.

Regarding claim 10, Spychalla teaches everything noted above including the arbor is out of driving engagement with the motor when the cutting tool is retracted. See Figs. 1-12 in Spychalla.

Regarding claim 11, Spychalla teaches everything noted above including a swing arm 99 pivotally connected to the first side of the turnion near a front of the turnion wherein the swing arm 99 has a first end and a second end such that the swing arm pivots about the first end. See Figs. 1-12 in Spychalla.

Regarding claim 12-15, Spychalla teaches everything noted above including that the swing arm moves independently of the motor. See Figs. 1-12 in Spychalla.

(10) Response to Argument

Appellant's argument that Spychalla does not disclose or suggest that it is possible to automatically disengage the cutting tool from the motor and retract the cutting tool from the

region independently of the motor is not persuasive. It should be noted that the instant invention is substantially the same as the invention in Gass. In instant invention, during the retraction of the cutting tool the motor is disengaged from driving the cutting tool. In the table saw of the instant invention, the cutting tool is coupled to a motor by a belt. This is the reason that during the retraction of the cutting tool as the belt moves downwardly its tension diminishes and consequently the belt disengages from the motor. However, same table saws, such as the table saw in Gass, have a direct drive system in which the cutting tool is directly connected to the motor and the motor moves up and down with the cutting tool. The retraction mechanism in Gass is provided for the table saw that has a direct drive system. However, the retraction mechanism in Gass also works with the other type of drive systems such as Spychalla's indirect drive system in which a motor is coupled to a cutting tool by a belt. It should be noted that the direct drive system and indirect drive system are functionally art-recognized equivalents, since both drive systems connect the motor to the cutting tool and drive the cutting tool. Therefore, it would have been obvious for a person of ordinary skill in the art to replace the direct drive system by the indirect drive system.

In addition, Spychalla teaches that the cutting tool does not carry an additional weight during the movement of the cutting tool, since the motor is connected remotely to the cutting tool. The weight of Spychalla's cutting tool is less than a cutting tool in Gass, which carries a motor when it is lifted or retracted. Therefore, it would have been obvious to a person of ordinary skill in the art to replace Gass' drive system by the drive system in Spychalla in order to reduce the mass of the cutting tool and facilitated vertical movement of the cutting tool.

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Spychalla teaches an indirect drive system in which a cutting tool 101 is coupled to a motor 88 by belt 110". As the cutting tool retracts downwardly the tension of belt 110" diminishes and consequently the belt disengages from the cutting tool. Spsychalla teaches that the cutting tool is retracted by a manual mechanism 105-106. However, Gass teaches an automatic retracting mechanism 1183 for retracting the cutting tool. It should be noted that the retracting mechanism in Gass is not replaced by Spsychalla's retracting mechanism. As stated above, only Gass' drive mechanism is replaced by Spsychalla's drive system. In other words, the motor in Gass' drive mechanism is placed below the cutting tool and coupled to the cutting tool by a belt, as taught by Spsychalla. In this case, the automatic retracting mechanism 1183 still retracts the saw blade 40 from the cutting region towards the motor that is positioned below the cutting tool. Therefore, Gass in combination with Spsychalla teaches that the cutting tool is automatically retracted from the cutting region independently from the motor.

In response to Appellant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969. In this case, Spsychalla teaches a circular cutting machine that does not have a safety mechanism. Gass

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teaches a circular cutting machine that includes a safety mechanism. Therefore, it would have been obvious to a person of ordinary skill in the art to provide Spychalla's table saw with the detection and reaction systems, as suggested by Gass, in order to ensure the safety of the operator in the case that operator gets too close to the movable cutting tool. In addition, Gass's drive system could be replaced by the drive system in Spaycholla for the reasons specified above.

Appellant's argument that combination of Gass and Spychalla does not disclose or suggest that the cutting tool is mounted to the first side of the turnion and the motor is mounted to the second side of the turnion is not persuasive. Gass teaches a turnion 12 that includes a first side and a second side. It should be noted that claim 6 does not specify that the second side is located opposite than the first side. Therefore, the top portion of the turnion is considered to be the first side of the turnion and the bottom portion of the turnion is considered to be the second side of the turnion. The cutting tool 40 is mounted to the first side of the turnion as shown in Fig. 5 in Gass. Gass as modified by Spychalla, teaches that the motor is located below the cutting tool. In this case, the motor is placed below the cutting tool 40 and it is mounted on the second side of the turnion.

In addition, any structure between the cutting tool 101 and the motor is considered to be a turnion in Spychalla. For example, support frame 21', shown in Fig. 2, could be considered as a turnion. The cutting tool 101 is mounted to the first side of the turnion 21' via the table 10 and the motor is mounted to the second side of the turnion 21' via the table 10.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

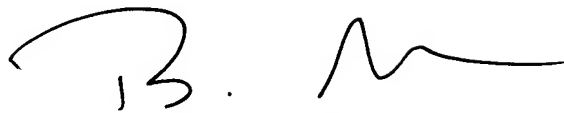
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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Ghassem Alie

07/10/07



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